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PROMIORRHYNCHUS POLHEMUSI NEW GENUS, NEW SPECIES, FROM MEXICO (HETEROPTERA: ARADIDAE)

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Abstract.—The micropterous *Promiorrhynchus polhemusi* new genus, new species from Veracruz, Mexico, is described and figured. The new taxon is related to but distinguished by a combination of characters from the macropterous Neotropical genera *Miorrhynchus* Usinger & Matsuda, *Rhynchomirus* Kormilev and *Sailеriessa* Usinger & Matsuda. The only micropterous Neotropical genera known to date are *Delnocoris* Kormilev and *Kelaino* Kormilev, which show a similar alary reduction but are distinct different taxa.

Key Words: Heteroptera, Aradidae, Mezirinae, *Promiorrhynchus polhemusi* new genus, new species, Mexico.

The subfamily Mezirinae is represented in the Neotropical region so far by 42 genera and more than 300 species (Kormilev and Froeschner, 1987). While eleven of those genera are apterous, only the two monotypic genera *Delnocoris* Kormilev from Costa Rica and *Kelaino* Kormilev from Colombia are micropterous. This reduced alary condition occurs also in very few species of generally macropterous genera such as *Pictinus* Stål (2 sp.) and *Notapictinus* Usinger and Matsuda (1 sp.), all of them only known from Brazil.

Discovery of a micropterous species from Southeastern Mexico, which shares some characters of related macropterous genera, but does not fit into one of them (Drake and Kormilev, 1958; Usinger and Matsuda, 1959; Kormilev, 1976), made it necessary to assign it to a new genus, which is described below.

Measurements are taken with a micrometer eyepiece 40 units = 1 mm.

Abbreviations for depositories of types: CEHI, Collection Ernst Heiss, Innsbruck, Austria; UNAM, Universidad Nacional Autónoma de México, Instituto de Biologia; USNM, National Museum of Natural History, Smithsonian Institution, Washington D.C.

Promiorrhynchus, new genus

Type species. *Promiorrhynchus polhemusi,* new species.

Diagnosis. Distinguished from all macropterous genera of similar habitus (*Miorrhynchus* with 14 species distributed from Paraguay to Panama; *Rhynchomirus,* one species from Peru; *Saileriessa,* one species from Panama) by a combination of characters: antennae 3.3× as long as width of head across eyes, postocular portion of head with a prominent tubercle, pronotum with rounded anterolateral angles and a deep transverse sulcus at middle, scutellum rounded, hemelytra reduced to oblique wing pads, spiracles II–IV ventral, V–VIII lateral and visible from above, vestiture of body and appendages with yellow curled hairs.

Distribution. Mexico.

Description. Small, about 5 mm, micropterous. Body elongate, attenuated anteriorly. Surface matte, granulate, beset with stiff erect, apically mostly curved hairs on raised portions of body and on appendages.

Head. Longer than wide across eyes. Genae slightly projecting beyond clypeus, beset with tubercles bearing stiff hairs. Antenniferous tubercles shorter than clypeus, straight, with blunt apices. Antennae long and slender, 3.3× as long as width of head. Eyes ovate, partially inserted. Postocular portion straight and long, posteriorly with a lateral prominent tubercle bearing stiff hairs, then strongly converging to collar. Rostrum shorter than head, arising from a slitlike atrium, rostral groove closed posteriorly.

Pronotum. Wider than long, anterolateral angles broadly rounded, collar distinct. Disk medially with a deep transverse impression, anterior portion with sublateral longitudinal elevations, posterior portion coarsely granulate. *Scutellum.* Wider than long, rounded, with a median longitudinal elevation, margins carinate. *Hemelytra.* Corium reduced to oblique wingpads, membrane and hind wings absent.

Abdomen. Raised first and lower second mediotergite (Mtg) exposed, separated by a transverse suture. Tergal plate with Mtg III–VI fused, moderately elevated medially. Dorsal laterotergites (Dltg) somewhat reflexed laterally, with increasingly producing posterolateral angles. Dltg II + III fused and badly delimited by an arcuate impression dorsally.

Ventral side. Pro-, meso- and metasternum depressed medially, marked by distinct transverse sutures. Metathoracic scent gland canals forming an oblique elevation, which is visible from above. Spiracles II–IV ventral, V sublateral on ventral laterotergite (Vltg) but visible from above, VI–VIII lateral and visible from above.

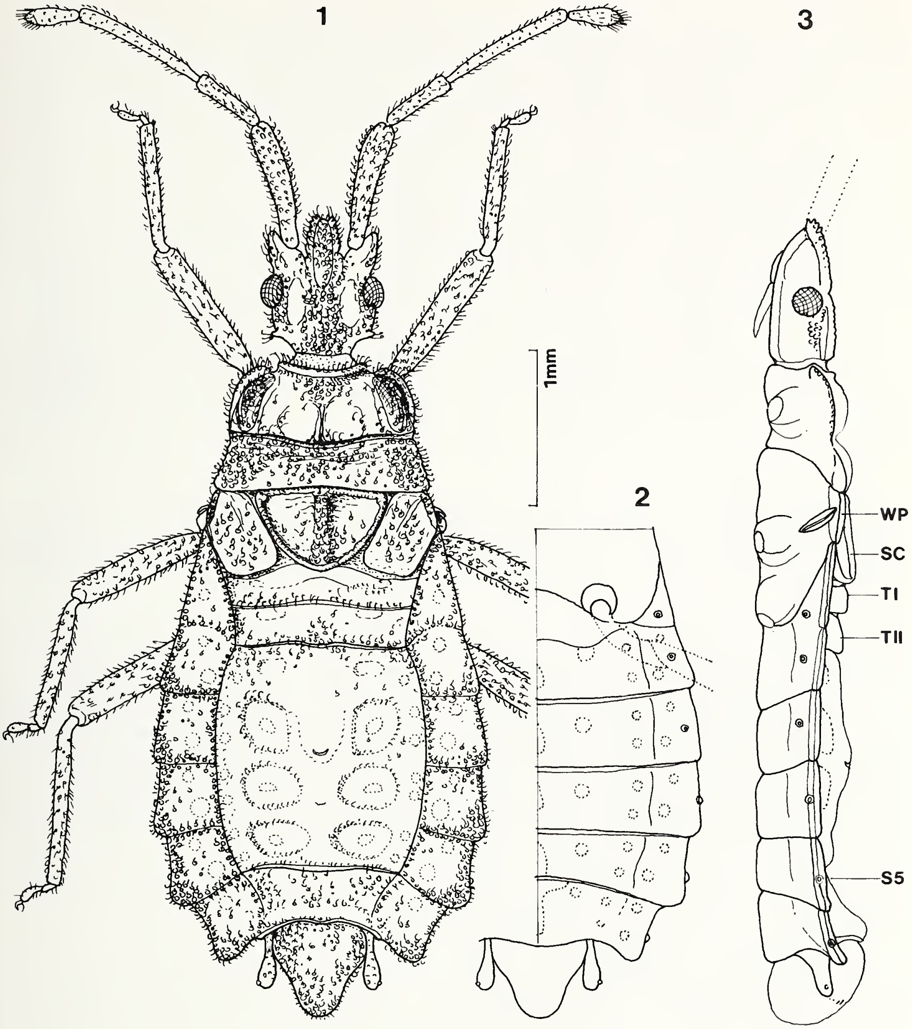
Legs. Long and slender, femora and tibiae cylindrical, claws with curved pulvilli.

Etymology. Named for its resemblance to the macropterous genus *Miorrrhynchus.* Gender masculine.

Discussion. The new genus resembles the genera *Miorrhynchus, Rhynchomirus* and *Saileriessa* in habitus, having a slender elongate body, long legs and antennae with third segment longest, but all of them are only known from macropterous and one brachypterous species.

From the widespread *Miorrhynchus,* the only other genus with curled hairs, *Promiorrhynchus* is distinguished at once by spiracles V–VIII lateral (VI–VIII lateral in *Miorrhynchus*), genae slightly longer than clypeus (not longer in *Miorrhynchus*) and postocular portion of head with a prominent lateral tubercle, which is lacking in *Miorrhynchus. Rhynchomirus* shares the same long antennae and spiracles V–VIII are also lateral, but the new genus has curled hairs and the pronotum has a transverse impression, both characters lacking in *Rhynchomirus,* the scutellum is rounded and not triangular as in *Rhynchomirus. Saileriessa* has also spiracles V–VIII lateral as *Promiorrhynchus,* but shows a smooth surface and lacks also the curled hairs, the anterolateral margin of the pronotum is angular not rounded as in *Promiorrhynchus* and the head is much shorter than the pronotum (1.1 times in new genus).

The micropterous genus *Delnocoris* has long lateral expansions on pro- and mesonotum and a long posteriorly constricted head. *Kelaino,* the second micropterous genus, has a transverse head and pronotum and shorter antennae. Both are seemingly not related to *Promiorrhynchus.*



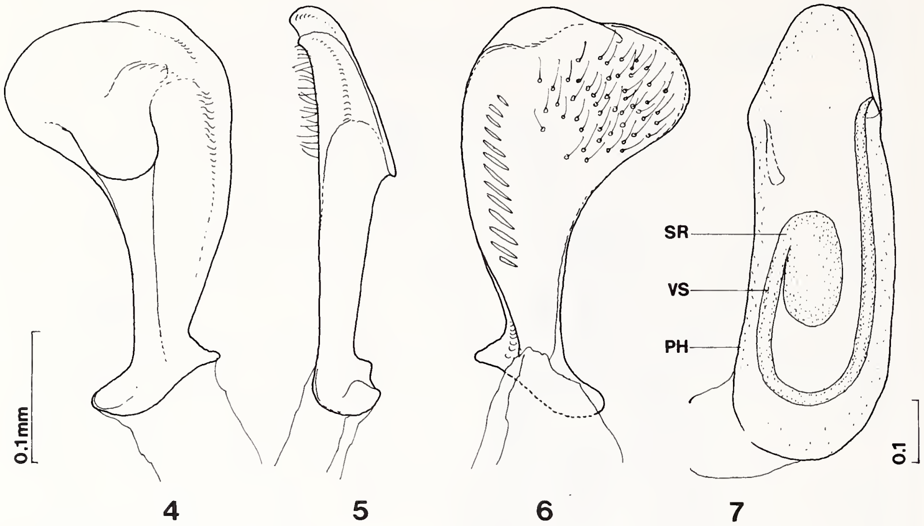
Figs. 1–3. *Promiorrhynchus polhemusi* new genus, new species. 1. Holotype male, habitus dorsal. 2. Ventral side. 3. Lateral view. Abbreviations: SC—scutellum; S5—spiracle of Vltg V; T I—mediotergite I; T II—mediotergite II; WP—wingpad.

Promiorrhynchus polhemusi, new species

Figs. 1–7

Types. Holotype, ♂, MEXICO, **Veracruz,** Catemaco — Los Tuxtlas, 18.vii.1992, S. Ebner (USNM). Paratypes: 4 males, same data as holotype (CEHI, UNAM).

In recognition of their kind assistance in entomological matters, the holotype is presented to the National Museum, Smithsonian Institution, Washington D.C. and a paratype to Universidad Nacional Autónoma de México, Instituto de Biologia.



Figs. 4–7. *Promiorrhynchus polhemusi* new genus, new species. 4–6. Right paramere in different positions. 7. Aedeagus lateral. Abbreviations: PH—phallosoma; SR—sperm reservoir; VS—vesica.

Description. Male, micropterous, habitus as Fig. 1.

Head. Longer than wide across eyes (35:31); genae slightly producing beyond apex of clypeus, their apices with tubercles bearing stiff hairs. Antenniferous tubercles with subparallel lateral margins, apices blunt, shorter than clypeus. Antennae slender, 3.3 times as long as width of head across eyes (102:31), first segment long and thickest, second thinner and shorter, third thin and longest, fourth barrelshaped with pilose apex. Relative length of segments I:II:III:IV = 33:19:35:15. Eyes ovate. Vertex raised medially with 2 (1 + 1) ovate depressions laterad. Postocular portion straight with a laterally projecting prominent tubercle, which is beset with long hairs. Rostrom short, not reaching closed elevated border of rostral groove.

Pronotum. Subrectangular, shorter than wide (30:51). Anterior portion with subparallel lateral margins, broadly rounded and reflexed anterolaterally. Collar ringlike. Disk with 2 (1 + 1) sublateral ridges, surface inbetween smooth with a longitudinal groove, which is connected to the transverse sulcus dividing the pronotal disk. Posterior portion with coarse granulation which is more dense at humeri.

Scutellum. Wider than long (21:33), of semicircular shape. Anterior and lateral margins elevated. Disk with a longitudinal granulate elevation medially and coarse tubercles laterad.

Hemelytra. Corium reduced to subrectangular wingpads, not covering completely the metanotum. Surface coarsely granulate.

Abdomen. Elongate, ovate, lateral margins of Dltg III to VII with rounded, increasingly producing posterolateral angles. Dltg II and III fused, but marked by an arcuate depression dorsally. Mtg I + II exposed, their posterior margin raised. Tergal plate with a median elevation, highest on Mtg IV. Metathoracal scent gland canals visible from above as split, rounded elevations.

Venter. Mediosternites (Mst) II + III fused, medially marked by a curved suture. Mst III to VII separated by deep transverse, from ventral laterotergites by thin longitudinal sulci. Spiracles II to IV ventral, close to lateral margin, V sublateral and visible from above, VI to VIII lateral and also visible from above (Fig. 2).

Legs. Long and slender, femora and tibiae cylindrical with coarse granulation and stiff hairs.

Male genitalic structures. Pygophore large, pyriform with rounded apex. Parategites VIII club-shaped, reaching ⅔ of pygophore. Parameres blade-like, the inner face with a file like row of 12–14 short carinae and stiff hairs (Figs. 4–6). Aedeagus with anteriorly attenuated and split phallosoma, vesica long and curved (Fig. 7).

Measurements. Holotype. Length 5.1 mm, length of antennae 2.55 mm, width of abdomen across Dltg IV 2.1 mm. Length of paratypes 5.1–5.2 mm.

Etymology. It is a pleasure to dedicate this interesting species to my friend John T. Polhemus on the occasion of his 70th birthday.

ACKNOWLEDGMENTS

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